

APPENDIX A

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“transmission system” in Claim 19				

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 19 Step 1	“A distribution method responsive to requests from a user identifying items in a transmission system containing information to be sent from the transmission system to receiving systems at remote locations, the method comprising the steps of:”	Components described in the specification and illustrated by Block Diagram 2a and 2b labeled source material library 111 , library access interface 121 and library system control computer 1123 .	<p>“The source material library 111 may include different types of materials including television programs, movies, audio recordings, still pictures, files, books, computer tapes, computer disks, documents of various sorts, musical instruments and other physical objects.” (6:10-15.) (See section I(A)(i) of accompanying memorandum for a further discussion of source material library 111.)</p> <p>“The library access interface 121 receives transmission requests either directly from the users or indirectly by remote order processing and item database 300.” (13:37-40.) (See section I(A)(viii) of accompanying memorandum for a further discussion of library access interface 121.)¹</p> <p>“All transmission requests from the access methods are placed into a transmission queue managed by the library system control computer 1123.” (15:33-35.) (See section I(A)(viii) of accompanying memorandum for a further discussion of library system control computer 1123.)</p>	<p>The Court held that the “item . . . containing information” in this limitation means “physical items. . .” (3rd CCO at 15.) The only place such items can exist “in a transmission system” is in the source material library. (“the specification discloses a component of the ‘transmission system,’ i.e., the ‘source material library’ as a component which holds items.” 5th CCO at 16.) Accordingly, the source material library must be present in Claim 19 to hold the physical “items . . . containing information.”</p> <p>Step 1 also requires that the transmission system respond to “requests from a user.” The transmission system must therefore have the library access</p>

¹ The specification refers to the “library access interface **121**” in the reception system, however, Figure 2b is ambiguous as to its location. The Court stated that the library access interface is “essential to allow the ‘transmission system’ to perform” Claim 19. (5th CCO at 12.) Based on the Court’s determination that the library access interface is in the transmission system, the Round 3 defendants include it in the transmission system charts.

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 19 Step 1 (cont'd)	See above			system control computer 1123 , which are the only disclosed components of a “transmission system” that process user requests.

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 19 Step 2	“ storing , in the transmission system, information from items in a compressed data form , the information including an identification code and being placed into ordered data blocks ”	Components described in the specification and illustrated by Block Diagram 2a and 2b labeled identification encoder 112 , converter 113 , time encoder 114 , precompression processor 115 , compressor 116 , compressed data formatter 117 and compressed data library 118 .	<p>“Prior to being made accessible to a user . . . the item must be . . . given a unique identification code by identification encoder 112.” (6:35-39.)</p> <p>“After the retrieved information is converted and formatted by the converter 113, the information may be time encoded by the time encoder 114,” which is the preferred and only disclosed “ordering means.” (7:64-66.)</p> <p>“Time encoding by the time encoder 114 is achieved by assigning relative time markers to the audio and video data as it passes from the converter 113 through the time encoder 114 to the precompression processor 115.” (8:16-19.)</p> <p>“Video precompression processor 115b buffers incoming video data and converts the aspect ratio and frame rate of the data, as required by compression processor 116.” (8:67-9:2.)</p> <p>“Once precompression processing is finished, the frames are compressed by the data compressor 116.” (9:41-42.)</p>	The Court held that this step requires that “previously to storing: (a) an identification code has already been assigned to the information; (b) the information has been placed into ordered data blocks, and (c) the information has been compressed.” (3 rd CCO at 18.) Therefore, steps (a)-(c) must be performed on the information before the “storing” called for in Step 2. As the citations in the preceding column indicate, and as further explained in section (I)(A) of the accompanying memorandum, components 112-118 are required to perform the processing identified in Step 2.

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 19 Step 2 (cont'd)	See above		<p>“After compression processing by compressor 116, the compressed audio and video data is preferably formatted and placed into a single file by the compressed data storage means 117.” (10:23-26.)²</p> <p>“After the data is processed into a file by the compressed data storage means 117, it is preferably stored in a compressed data library 118.” (10:36-39.)</p> <p>“Prior to being made accessible to a user of the transmission and receiving system of the present invention, the item must be stored in at least one compressed data library 118.” (6:35-38.)</p>	Claim 19, unlike Claim 21, does not specify that multiple compressed data libraries are required. Therefore, this claim covers implementations of the compressed data library which contain only one compressed data library and those that contain a plurality of compressed data libraries. (See Section I(A)(vi) of the accompanying memorandum.)

² The patent also refers to **117** as the “compressed data formatter.” (12:67-68.)

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 19 Step 2 (cont'd)	See above	Converter 113 includes (a) digital input receiver 124 and formatter 125 which includes a digital audio formatter 125a and a digital video formatter 125b , OR (b) analog input receiver 127 and analog-to-digital converter 123 which includes analog audio converter 123a and analog video converter 123b , OR (c) a converter including both (a) and (b).	<p>“The items stored in source material library 111 . . . may be in either analog or digital form. Converter 113 therefore includes analog input receiver 127 and digital input receiver 124. If items have only one format, only one type of input receiver 124 or 127 is necessary.” (6:26-68.)</p> <p>“When the retrieved information . . . is analog, the information is input to an analog-to-digital converter 123.” (7:12-14.) “Converter [123] preferably includes an analog audio converter 123a and an analog video converter 123b.” (7:19-20.)</p> <p>“When the information . . . is digital, the digital signal is input to the digital input receiver 124 . . . Formatter 125 includes digital audio formatter 125a and digital video formatter 125b. The digital audio information is input into a digital audio formatter 125a and the digital video information, if any, is input into digital video formatter 125b.” (7:1-10.)</p>	Converter 113 may include an analog input receiver 127 , and associated components 123a and 123b , a digital input receiver 124 and associated components 125a and 125b , or both analog and digital input receivers and associated components depending on what type of items are in the source material library. “If items have only one format, only one type of input receiver 124 or 127 is necessary.” (6:66-68.) Because this claim is not limited to retrieving either analog or digital information from the source material library, this claim covers any of the three implementations of converter 113 described in section I(A)(iii) of the accompanying memorandum.

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 19 Step 3	“sending a request, by the user to the transmission system, for at least a part of the stored information to be transmitted to the one of the receiving systems at one of the remote location selected by the user;”	Components described in the specification and illustrated by Block Diagram 2b labeled library access interface 121 and library system control computer 1123 .	<p>“The library access interface 121 receives transmission requests either directly from the users or indirectly by remote order processing and item database 300.” (13:37-40.) (See section I(A)(viii) of accompanying memorandum for a further discussion of library access interface 121.)</p> <p>“All transmission requests from the access methods are placed into a transmission queue managed by the library system control computer 1123.” (15:33-35.) (See section I(A)(viii) of accompanying memorandum for a further discussion of library system control computer 1123.)</p>	Step 3 requires that the transmission system receive “a request from a user.” The transmission system must therefore have the library access interface 121 and the library system control computer 1123 , which are the only disclosed components of a “transmission system” that process user requests.

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 19 Step 4	“ sending at least a portion of the stored information from the transmission system to the receiving system at the selected remote location;”	Components described in the specification and illustrated by Block Diagram 2b labeled transmission format converter 119 and transmitter 122 .	<p>“The transmission format means 119 receives the request and retrieves the composite formatted data block of the requested item stored in compressed data library 118 and converts the compressed formatted data block into a format suitable for transmission.” (13:40-45.)</p> <p>“Each channel type is accessed through the use of a communications adaptor board or processor connecting the data processed in the transmission format converter 119 to the transmission channel.” (15:67-16:3.)</p> <p>“The reception system 200 includes transceiver 201 which receives the audio and/or video information transmitted by transmitter 122 of the transmission system 100.” (18:3-6.)</p> <p>“In order to serve a multitude of channel types, a preferred embodiment of the present invention includes a multitude of output ports of each type” (16:16-18.)</p>	As the citations in the preceding column indicate, and as further explained in section I(A)(vii) of the accompanying memorandum, “transmission format converter” 119 and “transmitter” 122 are both required to perform the Step 4 act of “sending . . the stored information.” As also explained in section I(A)(vii) of the accompanying memorandum, the transmitter means must be capable of transmitting to a multiplicity of different communication channels including “common telephone service, ISDN and Broadband ISDN, DBS, cable television systems, microwave, and MAN.” (16:66-68.)
Claim 19 Step 5	“receiving the sent information by the receiving system at the selected remote location;”	This step is performed by, on or with a receiving system. (See Appendix B.)		

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 19 Step 6	“storing a complete copy of the received information in the receiving system at the selected remote location; and”	This step is performed by, on or with a receiving system. (See Appendix B.)		
Claim 19 Step 7	“playing back the stored copy of the information using the receiving system at the selected remote location at a time requested by the user.”	This step is performed by, on or with a receiving system. (See Appendix B.)		

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“transmission system” in Claim 20				
Claim 20 Step 1	“The distribution method as recited in claim 19, wherein the information in the items includes analog and digital signals, and wherein the step of storing the information comprises the steps, performed by the transmission system, of:”	Claim 20 depends from Claim 19, and therefore includes all of the components of a “transmission system” required by Claim 19. The specific implementation of the transmission system called for by Claim 20 is described below with respect to Steps 2-5.		

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 20 Step 2	“converting the analog signals of the information to digital components;”	The components described in the specification and illustrated by Block Diagram 2a labeled converter 113 where the converter must contain an analog input receiver 127 and an analog-to-digital converter 123 . The analog-to-digital converter includes an analog audio converter 123a and an analog video converter 123b .	<p>“The items stored in source material library 111 . . . may be in either analog or digital form. Converter 113 therefore includes analog input receiver 127 and digital input receiver 124. If items have only one format, only one type of input receiver 124 or 127 is necessary.” (6:62-68.)</p> <p>“When the retrieved information . . . is analog, the information is input to an analog-to-digital converter 123.” (7:12-14.) “Converter [123] preferably includes an analog audio converter 123a and an analog video converter 123b.” (7:19-20.)</p>	Because Step 2 requires “converting . . . analog signals . . . to digital components,” the converter 113 must include the components necessary to process analog input signals, including the analog input receiver. Because Step 2 also requires the converter 113 to have a digital input receiver, Claim 20 requires the implementation of encoder 113 which has both analog and digital input receivers. (<i>See</i> section I(A)(iii) of the accompanying memorandum.)

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 20 Step 3	“formatting the digital signals of the information;”	The components described in the specification and illustrated by Block Diagram 2a labeled converter 113 where the converter must contain a digital input receiver 124 and a formatter 125 . The formatter includes a digital audio formatter 125a and a digital video formatter 125b .	<p>“The items stored in source material library 111 . . . may be in either analog or digital form. Converter 113 therefore includes analog input receiver 127 and digital input receiver 124. If items have only one format, only one type of input receiver 124 or 127 is necessary.” (6:62-68.)</p> <p>“When the information . . . is digital, the digital signal is input to the digital input receiver 124 . . . Formatter 125 includes digital audio formatter 125a and digital video formatter 125b. The digital audio information is input into a digital audio formatter 125a and the digital video information, if any, is input into digital video formatter 125b.” (7:1-10.)</p>	Because Step 3 requires “formatting the digital signals” input to it from the items containing information (the Claim 20 preamble states that those physical items contain both analog and digital signals), the converter 113 must include the components necessary to process digital input signals, including the digital input receiver. Because Step 2 also requires an analog input receiver, Claim 20 requires the implementation of encoder 113 which has both analog and digital input receivers. (<i>See</i> section I(A)(iii) of the accompanying memorandum.)

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 20 Step 4	“ordering the converted analog signals and formatted digital signals into a sequence of addressable data blocks and;”	The components described in the specification and illustrated by Block Diagram 2a labeled time encoder 114 .	“The transmission system 100 . . . also preferably includes ordering means for placing the formatted information into a sequence of addressable data blocks. As shown in FIG. 2a , the ordering means in the preferred embodiment includes time encoder 114 ,” (7:59-63.)	Step 4 requires “ordering” the signals “into a sequence of addressable data blocks.” The component of the patentee-defined “transmission system” which makes a sequence of data blocks “addressable” is the time encoder 114 .
Claim 20 Step 5	“compressing the ordered information”	Components described in the specification and illustrated by Block Diagram 2a labeled precompression processor 115 and compressor 116 .	<p>The time encoder passes the data “to the precompression processor 115.” (8:16-19.)</p> <p>“Video precompression processor 115b buffers incoming video data and converts the aspect ratio and frame rate of the data, as required by compression processor 116.” (8:67-9:2.)</p> <p>“Once precompression processing is finished, the frames are compressed by the data compressor 116.” (9:41-42.)</p>	Step 5 requires compression. The specification explains that precompression processing prior to processing by the compressor is “required.” As described in the specification excerpts in preceding column and in section I(A)(v) of the accompanying memorandum, both precompression processor 115 and compressor 116 are required to perform compression.

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“transmission system” in Claim 21				
Claim 21	<p>“The method of claim 19 wherein the step of storing the items includes the substep of storing the items in a plurality of compressed audio and video libraries. leaving off “in the transmission system.”</p>	<p>Claim 21 depends from Claim 19, and therefore includes all of the components of a “transmission system” required by Claim 19. In addition, Claim 21 requires multiple compressed data libraries 118.</p>	<p>“This file address, combined with the frame number, and the library system address allow for complete addressability of all items stored in one or more compressed data libraries 118.” (10:50-54.)</p>	<p>As described in section I(A)(vi) of the accompanying memorandum, the basic “transmission system” can include either one compressed data library or a plurality of compressed data libraries. Claim 21 expressly requires the transmission system to have a plurality of compressed data libraries.</p>

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“transmission system” in Claim 22				
Claim 22 Step 1	“The method of claim 19 further comprising the steps, performed by the transmission system, of: ”	Claim 22 depends from Claim 19, and therefore includes all of the components of a “transmission system” required by Claim 19.		
Claim 22 Step 2	“storing a list of items available to the user from at least one compressed data library; and”	Components described in the specification and illustrated by Block Diagram 2b labeled library system control computer 1123 .	“The library access interface 121 in the reception system 200 preferably includes a title window where a list of available titles are alphabetically listed. This window has two modes: local listing of material contained within the library system control computer 1123 , and library listing for all available titles which may be received from the available, remotely accessible libraries. The titles listed in this window are sent from the database on the library system control computer 1123 or the remote order processing and item database 300 .” (17:44-53.)	The patent does not disclose components which perform the step of updating a “list of items,” but the library system control computer 1123 contains a list of titles which “are sent from the database on the library system control computer 1123 .” (17:44-53.)

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 22 Step 3	“providing the user with the list so that the user may remotely select a particular item for transmission;”	Components described in the specification and illustrated by Block Diagram 2b labeled library system control computer 1123 .	“The library access interface 121 in the reception system 200 preferably includes a title window where a list of available titles are alphabetically listed. This window has two modes: local listing of material contained within the library system control computer 1123 , and library listing for all available titles which may be received from the available, remotely accessible libraries. The titles listed in this window are sent from the database on the library system control computer 1123 or the remote order processing and item database 300 .” (17:44-53.)	The patent does not disclose components which perform the step of updating the “list of items,” but the library system control computer 1123 contains a list of titles which “are sent from the database on the library system control computer 1123 .” (17:44-53.)
“transmission system” in Claim 41				
Claim 41 Step 1	“A method of transmitting information to remote locations, the transmission method comprising the steps performed by a transmission system, of:”	The elements of the “transmission system” required to perform the steps of Claim 41 are explained below.		

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 41 Step 2	“storing items having information in a source material library ;”	The component described in the specification and illustrated by Block Diagram 2a labeled source material library 111 .	“The source material library 111 may include different types of materials including television programs, movies, audio recordings, still pictures, files, books, computer tapes, computer disks, documents of various sorts, musical instruments, and other physical objects.” (6:10-15.)	
Claim 41 Step 3	“ retrieving the information in the items from the source material library ;”	The component described in the specification and illustrated by Block Diagram 2a labeled identification encoder 112 .	“. . . identification encoding means for retrieving the information for the items from the source material library means and for assigning a unique identification code to the retrieved information.” (2:30-33.)	As described in the excerpts from the specification included in the preceding column and in section I(A)(ii) of the accompanying memorandum, the specification describes the identification encoder 112 as the component which retrieves information from the physical items in the source material library.
Claim 41 Step 4	“assigning a unique identification code to the retrieved information;”	The component described in the specification and illustrated by Block Diagram 2a labeled identification encoder 112 .	“Prior to being made accessible to a user . . . the item must be . . . given a unique identification code by identification encoder 112 .” (6:35-39.)	As described in the excerpts from the specification included in the preceding column with respect to Claim 41 Steps 3 and 4, and as further explained in section I(A)(ii) of the accompanying memorandum, the identification encoder 112 assigns the unique identification code.

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 41 Step 5	“placing the retrieved information into a predetermined format as formatted data; ”	The components described in the specification and illustrated by Block Diagram 2a labeled converter 113 .	“The processing also preferably includes placing the retrieved information into a predetermined format as formatted data by converter 113 (step 413b)” (18:68-19:2.)	As described in the excerpt from the specification included in the preceding column, and as further explained in section I(A)(iii) of the accompanying memorandum, the converter 113 puts the information into a predetermined format.

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 41 Step 5 (cont'd)	See above	Converter 113 includes (a) digital input receiver 124 and formatter 125 which includes a digital audio formatter 125a and a digital video formatter 125b , OR (b) analog input receiver 127 and analog-to-digital converter 123 which includes analog audio converter 123a and analog video converter 123b , OR (c) a converter including both (a) and (b).	<p>“The items stored in source material library 111 . . . may be in either analog or digital form. Converter 113 therefore includes analog input receiver 127 and digital input receiver 124. If items have only one format, only one type of input receiver 124 or 127 is necessary.” (6:62-68.)</p> <p>“When the retrieved information . . . is analog, the information is input to an analog-to-digital converter 123.” (7:12-14.) “Converter [123] preferably includes an analog audio converter 123a and an analog video converter 123b.” (7:19-20.)</p> <p>“When the information . . . is digital, the digital signal is input to the digital input receiver 124 . . . Formatter 125 includes digital audio formatter 125a and digital video formatter 125b. The digital audio information is input into a digital audio formatter 125a and the digital video information, if any, is input into digital video formatter 125b.” (7:1-10.)</p>	Converter 113 may include an analog input receiver 127 , and associated components 123a and 123b , a digital input receiver 124 and associated components 125a and 125b , or both analog and digital input receivers and associated components depending on what type of items are in the source material library. “If items have only one format, only one type of input receiver 124 or 127 is necessary.” (6:66-68.) Because this claim is not limited to retrieving either analog or digital information from the source material library, this claim covers any of the three implementations of converter 113 described in section I(A)(iii) of the accompanying memorandum.

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 41 Step 6	“placing the formatted data into a sequence of addressable data blocks; ”	The component described in the specification and illustrated by Block Diagram 2a labeled time encoder 114 .	“The transmission system 100 . . . also preferably includes ordering means for placing the formatted information into a sequence of addressable data blocks. As shown in FIG. 2a , the ordering means in the preferred embodiment includes time encoder 114 .” (7:59-63.)	The component of the patentee-defined “transmission system” which makes a sequence of data blocks “addressable” is the time encoder 114 .
Claim 41 Step 7	“ compressing the formatted and sequenced data blocks;”	Components described in the specification and illustrated by Block Diagram 2a labeled precompression processor 115 and compressor 116 .	<p>The time encoder passes the data “to the precompression processor 115.” (8:16-19.)</p> <p>“Video precompression processor 115b buffers incoming video data and converts the aspect ratio and frame rate of the data, as required by compression processor 116.” (8:67-9:2.)</p> <p>“Once precompression processing is finished, the frames are compressed by the data compressor 116.” (9:41-42.)</p>	Step 7 requires compression. The specification explains that precompression processing prior to processing by the compressor is “required.” As described in the specification excerpts in preceding column and in section I(A)(v) of the accompanying memorandum, both precompression processor 115 and compressor 116 are required to perform compression.

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 41 Step 8	“storing, as a file, the compressed, formatted, and sequenced data blocks with the assigned unique identification code; and”	Components described in the specification and illustrated by Block Diagram 2a and 2b labeled compressed data formatter 117 and compressed data library 118 .	<p>“After compression processing by compressor 116, the compressed audio and video data is preferably formatted and placed into a single file by the compressed data storage means 117.” (10:23-26.)</p> <p>“After the data is processed into a file by the compressed data storage means 117, it is preferably stored in a compressed data library 118.” (10:36-39.)</p> <p>“Prior to being made accessible to a user of the transmission and receiving system of the present invention, the item must be stored in at least one compressed data library 118.” (6:35-38.)</p>	As the citations in the preceding column indicate, and as further explained in section (I)(A)(vi) of the accompanying memorandum, both “compressed data formatter” 117 and “compressed data library” 118 are required to perform the “storing” required by Step 8.

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 41 Step 9	“ sending at least a portion of the file to one of the remote locations.”	Components described in the specification and illustrated by Block Diagram 2b labeled format converter 119 and transmitter 122 .	<p>“The transmission format means 119 receives the request and retrieves the composite formatted data block of the requested item stored in compressed data library 118 and converts the compressed formatted data block into a format suitable for transmission.” (13:40-45.) “Each channel type is accessed through the use of a communications adaptor board or processor connecting the data processed in the transmission format converter 119 to the transmission channel.” (15:67-16:3.)</p> <p>“The reception system 200 includes transceiver 201 which receives the audio and/or video information transmitted by transmitter 122 of the transmission system 100.” (18:3-6.)</p> <p>“In order to serve a multitude of channel types, a preferred embodiment of the present invention includes a multitude of output ports of each type.” (16:16-18.)</p>	As the citations in the preceding column indicate, and as further explained in section I(A)(vii) of the accompanying memorandum, “transmission format converter” 119 and “transmitter” 122 are both required to perform the Step 9 act of “sending . . the file.” As also explained in section I(A)(vii) of the accompanying memorandum, the transmitter means must be capable of transmitting to a multiplicity of different communication channels including “common telephone service, ISDN and Broadband ISDN, DBS, cable television systems, microwave, and MAN.” (16:66-68.)

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“transmission system” in Claim 42				
Claim 42 Step 1	“A transmission method as recited in Claim 41, wherein the step of placing further includes the steps of:”	Claim 42 depends from Claim 41, and therefore includes all of the components of a “transmission system” required by Claim 41. The specific implementation of the transmission system called for by Claim 42 is described below with respect to Steps 2-3.		

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 42 Step 2	“A/D converting analog signals of the retrieved information into a series of digital data bytes; and”	The components described in the specification and illustrated by Block Diagram 2a labeled converter 113 where the converter must contain an analog input receiver 127 and an analog-to-digital converter 123 . The analog-to-digital converter includes an analog audio converter 123a and an analog video converter 123b .	<p>“The items stored in source material library 111 . . . may be in either analog or digital form. Converter 113 therefore includes analog input receiver 127 and digital input receiver 124. If items have only one format, only one type of input receiver 124 or 127 is necessary.” (6:62-68.)</p> <p>“When the retrieved information . . . is analog, the information is input to an analog-to-digital converter 123.” (7:12-14.) “Converter [123] preferably includes an analog audio converter 123a and an analog video converter 123b.” (7:19-20.)</p>	Because Step 2 requires “converting analog signals . . .”, the converter 113 must include the components necessary to process analog input signals, including the analog input receiver. Claim 42 is therefore limited to either the analog-only converter implementation, or the implementation of converter 113 capable of handling both analog and digital signals. (See section I(A)(iii) of the accompanying memorandum for a description of these optional implementations.)
Claim 42 Step 3	“converting the series of digital data bytes into formatted data with a predetermined format.”	The components described in the specification and illustrated by Block Diagram 2a labeled converter 113 where the converter must contain an analog input receiver 127 and an analog-to-digital converter 123 .	“When the retrieved information from identification encoder 112 is analog, the information [sic] is input to an analog-to-digital converter 123 to convert the analog data of the retrieved information into a series of digital data bytes. Converter 123 preferably forms the digital data bytes into the same format as the output of formatter 125 .” (7:12-18.)	The Court found that “if as required by Claim 42, the additional step ‘converting the series of digital data bytes into formatted data with a predetermined format ’ is added to the step of ‘placing the retrieved information into a predetermined format as formatted data ’ as required by Claim 41, then Claim 42

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
	See above	The analog-to-digital converter includes an analog audio converter 123a and an analog video converter 123b .		<p>duplicates the ‘placing’ step of Claim 41.” (3rd CCO at 32.)</p> <p>The Court found this “renders Claim 42 arguably indefinite as requiring extraneous and duplicative steps.” (<i>Id.</i>)</p> <p>Accordingly, the components specified for performing Claim 41 may not be sufficient to perform this Step 3 of Claim 42.</p>

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“transmission system” in Claim 43				
Claim 43 Step 1	“A transmission method as recited in claim 41, wherein the step of placing further includes the steps of:”	Claim 43 depends from Claim 41, and therefore includes all of the components of a “transmission system” required by Claim 41. The specific implementation of the transmission system called for by Claim 43 is described below with respect to Steps 2-3.		

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 43 Step 2	“converting digital signals of the retrieved information into predetermined voltage levels; and”	The components described in the specification and illustrated by Block Diagram 2a labeled converter 113 where the converter must contain a digital input receiver 124 and a formatter 125 . The formatter includes a digital audio formatter 125a and a digital video formatter 125b .	<p>“The items stored in source material library 111 . . . may be in either analog or digital form. Converter 113 therefore includes analog input receiver 127 and digital input receiver 124. If items have only one format, only one type of input receiver 124 or 127 is necessary.” (6:62-68.)</p> <p>“When the information . . . is digital, the digital signal is input to the digital input receiver 124 . . . Formatter 125 includes digital audio formatter 125a and digital video formatter 125b. The digital audio information is input into a digital audio formatter 125a and the digital video information, if any, is input into digital video formatter 125b.” (7:1-10.)</p> <p>“When the information from identification encoder 112 is digital, the digital signal is input to the digital input receiver 124 where it is converted to a proper voltage.” (7:1-4.)</p>	Because Step 2 requires “converting digital signals . . .”, the converter 113 must include the components necessary to process digital input signals, including the digital input receiver. Claim 43 is therefore limited to either the digital-only converter implementation, or the implementation of converter 113 capable of handling both analog and digital signals. (See section I(A)(iii) of the accompanying memorandum for a description of these optional implementations.)
Claim 43 Step 3	“converting the predetermined voltage levels into formatted data with a predetermined format.”	See Step 2 above.		The Court found that its “finding with respect to the . . . arguable indefiniteness of Claim 42 applies with equal force to Claim 43.” (3 rd CCO at 32.) Accordingly, the components specified for performing Claim 41 may not be sufficient to perform the steps of Claim 43.

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“transmission system” in Claim 44				
Claim 44 Step 1	“A transmission method as recited in claim 41,”	Claim 44 depends from Claim 41, and therefore includes all of the components of a “transmission system” required by Claim 41. The specific implementation of the transmission system called for by Claim 44 is described below with respect to Step 2.		The Court found Claim 42 to be arguably indefinite. For the same reasons, Claim 44 is arguably indefinite as well, meaning the specification may not disclose components that correspond to Claim 44.
Claim 44 Step 2	“wherein the step of placing further includes the step of converting digital signals of the retrieved information into formatted data with a	The components described in the specification and illustrated by Block Diagram 2a labeled converter 113 where the converter must contain a digital input receiver 124 and a formatter 125 . The formatter includes a digital audio formatter 125a	<p>“The items stored in source material library 111 . . . may be in either analog or digital form. Converter 113 therefore includes analog input receiver 127 and digital input receiver 124. If items have only one format, only one type of input receiver 124 or 127 is necessary.” (6:62-68.)</p> <p>“When the information . . . is digital, the digital signal is input to the digital input receiver 124 . . . Formatter 125 includes digital audio formatter 125a and digital video formatter 125b. The digital audio information is input into a digital audio formatter 125a and the digital video information, if any, is input into digital</p>	Because Step 2 requires “converting digital signals . . .”, the converter 113 must include the components necessary to process digital input signals, including the digital input receiver. Claim 44 is therefore limited to either the digital-only converter implementation, or the implementation of converter 113 capable of handling both analog and digital signals. (See section I(A)(iii) of the

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
	predetermined format.”	and a digital video formatter 125b . The transmission system may also include an analog input receiver 127 and analog-to-digital converter 123 which includes analog audio converter 123a and analog video converter 123b .	video formatter 125b .” (7:1-10.)	accompanying memorandum for a description of these optional implementations.)

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“transmission system” in Claim 45				
Claim 45 Step 1	“A transmission method as recited in claim 41, wherein the storing step further comprises the step of:”	Claim 44 depends from Claim 41, and therefore includes all of the components of a “transmission system” required by Claim 41.		

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 45 Step 2	“separately storing a plurality of files, each including compressed, sequenced data blocks.”	Components described in the specification and illustrated by Block Diagram 2a and 2b labeled compressed data formatter 117 and compressed data library 118 .	<p>“After compression processing by compressor 116, the compressed audio and video data is preferably formatted and placed into a single file by the compressed data storage means 117.” (10:23-26.)</p> <p>“After the data is processed into a file by the compressed data storage means 117, it is preferably stored in a compressed data library 118.” (10:36-39.)</p> <p>“Prior to being made accessible to a user of the transmission and receiving system of the present invention, the item must be stored in at least one compressed data library 118.” (6:35-38.)</p>	<p>As the citations in the preceding column indicate, and as further explained in section (I)(A)(vi) of the accompanying memorandum, both “compressed data formatter” 117 and “compressed data library” 118 are required to perform the “storing” required by Step 2.</p> <p>The Court found that the “specification does not describe storage in multiple files,” and therefore declined to construe Step 2 as “arguably indefinite.” (3rd CCO at 33.) There are no components disclosed which perform this aspect of Step 2.</p>

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“transmission system” in Claim 46				
Claim 46 Step 1	“A transmission method as recited in claim 45, further comprising the steps, performed by the transmission system, of:”	Claim 46 depends from Claim 45, and therefore includes all of the components of a “transmission system” required by Claim 45.		
Claim 46 Step 2	“generating a listing of available items;”			The specification does not describe the step of “generating a listing of available items,” and does not disclose any component that performs this step.
Claim 46 Step 3	“receiving transmission requests to transmit available items; and”	Components described in the specification or illustrated by Block Diagram 2b labeled library access interface 121 and library system control computer 1123 .	<p>“The library access interface 121 receives transmission requests either directly from the users or indirectly by remote order processing and item database 300.” (13:37-40.) (See brief part I.A.viii for a further discussion of the location of the library access interface.)</p> <p>“All transmission requests from the access methods are placed into a transmission queue managed by the library system control computer 1123.” (15:33-35.)</p>	As described in section I(A)(viii) of accompanying memorandum, library access interface 121 and library system control computer 1123 are both required to process user requests made to the transmission system.

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 46 Step 4	“retrieving stored formatted data blocks corresponding to requests from users.”	Components described in the specification or illustrated by Block Diagram 2b labeled library access interface 121 and library system control computer 1123 .	<p>“The transmission system 100 of the present invention may also preferably include library access/interface means for receiving transmission requests to transmit items and for retrieving formatted data blocks stored in the compressed data library 118 corresponding to the requests from users. The compressed audio and/or video data blocks, along with any of the information about the item stored in the compressed data library 118 may be accessed via library access interface 121.” (13:29-37.)</p> <p>“All transmission requests from the access methods are placed into a transmission queue managed by the library system control computer 1123.” (15:33-35.)</p> <p>“To complete an order, the remote order processing and item database 300 preferably connects to the compressed data library 118 of choice via the library access interface 121 and communicates with the library system control computer 1123.” (15:23-27.)</p>	

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“transmission system” in Claim 2				
Claim 2 Step 1	<p>“A distribution method responsive to requests from a user identifying items in a transmission system containing information to be sent from the transmission system to receiving systems at remote locations, the method comprising the steps of:”</p>	<p>Components described in the specification and illustrated by Block Diagram 2a and 2b labeled source material library 111, library access interface 121 and library system control computer 1123.</p>	<p>“The source material library 111 may include different types of materials including television programs, movies, audio recordings, still pictures, files, books, computer tapes, computer disks, documents of various sorts, musical instruments and other physical objects.” (6:10-15.) (See section I(A)(i) of accompanying memorandum for a further discussion of source material library 111.)</p> <p>“The library access interface 121 receives transmission requests either directly from the users or indirectly by remote order processing and item database 300.” (13:37-40.) (See section I(A)(viii) of accompanying memorandum for a further discussion of library access interface 121.)</p> <p>“All transmission requests from the access methods are placed into a transmission queue managed by the library system control computer 1123.” (15:33-35.) (See section I(A)(viii) of accompanying memorandum for a further discussion of library system control computer 1123.)</p>	<p>The Court held that the “items . . . containing information” in this limitation means “physical items. . .” (3rd CCO at 15.) The only place such items can exist “in a transmission system” is in the source material library. (“the specification discloses a component of the ‘transmission system,’ i.e., the ‘source material library’ as a component which holds items.” 5th CCO at 16.) Accordingly, the source material library must be present in Claim 2 to hold the physical “items . . . containing information.”</p>

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 2 Step 1 (cont'd)	See above			Step 1 also requires that the transmission system respond to “requests from a user.” The transmission system must therefore have the library access interface 121 and the library system control computer 1123 , which are the only disclosed components of a “transmission system” that process user requests.

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 2 Step 2	“ storing , in the transmission system, information from items in a compressed data form , the information including an identification code and being placed into ordered data blocks ;”	Components described in the specification and illustrated by Block Diagram 2a and 2b labeled identification encoder 112 , converter 113 , time encoder 114 , precompression processor 115 , compressor 116 , compressed data formatter 117 and compressed data library 118 .	<p>“Prior to being made accessible to a user . . . the item must be . . . given a unique identification code by identification encoder 112.” (6:35-39.)</p> <p>“After the retrieved information is converted and formatted by the converter 113, the information may be time encoded by the time encoder 114,” which is the preferred “ordering means.” (7:64-66.)</p> <p>“Time encoding by the time encoder 114 is achieved by assigning relative time markers to the audio and video data as it passes from the converter 113 through the time encoder 114 to the precompression processor 115.” (8:16-19.)</p> <p>“Video precompression processor 115b buffers incoming video data and converts the aspect ratio and frame rate of the data, as required by compression processor 116.” (8:67-9:2.)</p> <p>“Once precompression processing is finished, the frames are compressed by the data compressor 116.” (9:41-42.)</p>	The Court held that this step requires that “previously to storing: (a) an identification code has already been assigned to the information; (b) the information has been placed into ordered data blocks, and (c) the information has been compressed.” (3 rd CCO at 18.) Therefore, steps (a)-(c) must be performed on the information before the “storing” called for in Step 2. As the citations in the preceding column indicate, and as further explained in section (I)(A) of the accompanying memorandum, components 112-118 are required to perform the processing identified in Step 2.

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 2 Step 2 (cont'd)	See above		<p>“After compression processing by compressor 116, the compressed audio and video data is preferably formatted and placed into a single file by the compressed data storage means 117.” (10:23-26.)</p> <p>“After the data is processed into a file by the compressed data storage means 117, it is preferably stored in a compressed data library 118.” (10:36-39.)</p> <p>“Prior to being made accessible to a user of the transmission and receiving system of the present invention, the item must be stored in at least one compressed data library 118.” (6:35-38.)</p>	Claim 2 does not specify that multiple compressed data libraries are required. Therefore, this claim covers implementations of the compressed data library which contain only one compressed data library and those that contain a plurality of compressed data libraries. (See Section I(A)(vi) of the accompanying memorandum.)

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 2 Step 2 (cont'd)	See above	Converter 113 includes (a) digital input receiver 124 and formatter 125 which includes a digital audio formatter 125a and a digital video formatter 125b , OR (b) analog input receiver 127 and analog-to-digital converter 123 which includes analog audio converter 123a and analog video converter 123b , OR (c) a converter including both (a) and (b).	<p>“The items stored in source material library 111 . . . may be in either analog or digital form. Converter 113 therefore includes analog input receiver 127 and digital input receiver 124. If items have only one format, only one type of input receiver 124 or 127 is necessary.” (6:62-68.)</p> <p>“When the retrieved information . . . is analog, the information is input to an analog-to-digital converter 123.” (7:12-14.) “Converter [123] preferably includes an analog audio converter 123a and an analog video converter 123b.” (7:19-20.)</p> <p>“When the information . . . is digital, the digital signal is input to the digital input receiver 124 . . . Formatter 125 includes digital audio formatter 125a and digital video formatter 125b. The digital audio information is input into a digital audio formatter 125a and the digital video information, if any, is input into digital video formatter 125b.” (7:1-10.)</p>	<p>Converter 113 may include an analog input receiver 127, and associated components 123a and 123b, a digital input receiver 124 and associated components 125a and 125b, or both analog and digital input receivers and associated components depending on what type of items are in the source material library. “If items have only one format, only one type of input receiver 124 or 127 is necessary.” (6:66-68.)</p> <p>Because this claim is not limited to retrieving either analog or digital information from the source material library, this claim covers any of the three implementations of converter 113 described in section I(A)(iii) of the accompanying memorandum.</p>

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 2 Step 3	“ sending a request, by the user to the transmission system for at least a part of the stored information to be transmitted to a reception system associated with a receiving system at one of the remote locations selected by the user; ”	Components described in the specification and illustrated by Block Diagram 2b labeled library access interface 121 and library system control computer 1123 .	<p>“The library access interface 121 receives transmission requests either directly from the users or indirectly by remote order processing and item database 300.” (13:37-40.) (See section I(A)(viii) of accompanying memorandum for a further discussion of library access interface 121.)</p> <p>“All transmission requests from the access methods are placed into a transmission queue managed by the library system control computer 1123.” (15:33-35.) (See section I(A)(viii) of accompanying memorandum for a further discussion of library system control computer 1123.)</p>	Step 3 requires that the transmission system receive “a request from a user.” The transmission system must therefore have the library access interface 121 and the library system control computer 1123 , which are the only disclosed components of a “transmission system” that process user requests.

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 2 Step 4	“ sending at least a portion of the stored information from the transmission system to the reception system;”	Components described in the specification and illustrated by Block Diagram 2b labeled transmission format converter 119 and transmitter 122 .	<p>“The transmission format means 119 receives the request and retrieves the composite formatted data block of the requested item stored in compressed data library 118 and converts the compressed formatted data block into a format suitable for transmission.” (13:40-45.) “Each channel type is accessed through the use of a communications adaptor board or processor connecting the data processed in the transmission format converter 119 to the transmission channel.” (15:67-16:3.)</p> <p>“The reception system 200 includes transceiver 201 which receives the audio and/or video information transmitted by transmitter 122 of the transmission system 100.” (18:3-6.)</p> <p>“In order to serve a multitude of channel types, a preferred embodiment of the present invention includes a multitude of output ports of each type” (16:16-18.)</p>	As the citations in the preceding column indicate, and as further explained in section I(A)(vii) of the accompanying memorandum, “transmission format converter” 119 and “transmitter” 122 are both required to perform the Step 4 act of “sending . . the stored information.” As also explained in section I(A)(vii) of the accompanying memorandum, the transmitter means must be capable of transmitting to a multiplicity of different communication channels including “common telephone service, ISDN and Broadband ISDN, DBS, cable television systems, microwave, and MAN.” (16:66-68.)
Claim 2 Step 5	“receiving the sent information by the reception system;”	This step is performed by, on or with a receiving system. (See Appendix B.)		

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 2 Step 6	“storing a complete copy of the received information in the reception system; and”	This step is performed by, on or with a receiving system. (See Appendix B.)		
Claim 2 Step 7	“playing back the stored copy of the information from the reception system to the receiving system at the selected remote location at a time requested by the user.”	This step is performed by, on or with a receiving system. (See Appendix B.)		

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“transmission system” in Claim 5				
Claim 5 Step 1	<p>“A distribution method responsive to requests from a user identifying items in a transmission system containing information to be sent from the transmission system to receiving systems at remote locations, the method comprising the steps of:”</p>	<p>Components described in the specification and illustrated by Block Diagram 2a and 2b labeled source material library 111, library access interface 121 and library system control computer 1123.</p>	<p>“The source material library 111 may include different types of materials including television programs, movies, audio recordings, still pictures, files, books, computer tapes, computer disks, documents of various sorts, musical instruments and other physical objects.” (6:10-15.) (See section I(A)(i) of accompanying memorandum for a further discussion of source material library 111.)</p> <p>“The library access interface 121 receives transmission requests either directly from the users or indirectly by remote order processing and item database 300.” (13:37-40.) (See section I(A)(viii) of accompanying memorandum for a further discussion of library access interface 121.)</p> <p>“All transmission requests from the access methods are placed into a transmission queue managed by the library system control computer 1123.” (15:33-35.) (See section I(A)(viii) of accompanying memorandum for a further discussion of library system control computer 1123.)</p>	<p>The Court held that the “item . . . containing information” in this limitation means “physical items. . .” (3rd CCO at 15.) The only place such items can exist “in a transmission system” is in the source material library. (“the specification discloses a component of the ‘transmission system,’ i.e., the ‘source material library’ as a component which holds items.” 5th CCO at 16.) Accordingly, the source material library must be present in Claim 5 to hold the physical “items . . . containing information.”</p>

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 5 Step 1 (cont'd)	See above			Step 1 also requires that the transmission system respond to “requests from a user.” The transmission system must therefore have the library access interface 121 and the library system control computer 1123 , which are the only disclosed components of a “transmission system” that process user requests.

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 5 Step 2	“ storing , in the transmission system, information from items in a compressed data form , the information including an identification code and being placed into ordered data blocks ;”	Components described in the specification and illustrated by Block Diagram 2a and 2b labeled identification encoder 112 , converter 113 , time encoder 114 , precompression processor 115 , compressor 116 , compressed data formatter 117 and compressed data library 118 .	<p>“Prior to being made accessible to a user . . . the item must be . . . given a unique identification code by identification encoder 112.” (6:35-39.)</p> <p>“After the retrieved information is converted and formatted by the converter 113, the information may be time encoded by the time encoder 114,” which is the preferred “ordering means.” (7:64-66.)</p> <p>“Time encoding by the time encoder 114 is achieved by assigning relative time markers to the audio and video data as it passes from the converter 113 through the time encoder 114 to the precompression processor 115.” (8:16-19.)</p> <p>“Video precompression processor 115b buffers incoming video data and converts the aspect ratio and frame rate of the data, as required by compression processor 116.” (8:67-9:2.)</p> <p>“Once precompression processing is finished, the frames are compressed by the data compressor 116.” (9:41-42.)</p>	The Court held that this step requires that “previously to storing: (a) an identification code has already been assigned to the information; (b) the information has been placed into ordered data blocks, and (c) the information has been compressed.” (3 rd CCO at 18.) Therefore, steps (a)-(c) must be performed on the information before the “storing” called for in Step 2. As the citations in the preceding column indicate, and as further explained in section (I)(A) of the accompanying memorandum, components 112-118 are required to perform the processing identified in Step 2.

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 5 Step 2 (cont'd)	See above		<p>“After compression processing by compressor 116, the compressed audio and video data is preferably formatted and placed into a single file by the compressed data storage means 117.” (10:23-26.)</p> <p>“After the data is processed into a file by the compressed data storage means 117, it is preferably stored in a compressed data library 118.” (10:36-39.)</p> <p>“Prior to being made accessible to a user of the transmission and receiving system of the present invention, the item must be stored in at least one compressed data library 118.” (6:35-38.)</p>	Claim 5 does not specify that multiple compressed data libraries are required. Therefore, this claim covers implementations of the compressed data library which contain only one compressed data library and those that contain a plurality of compressed data libraries. (See Section I(A)(vi) of the accompanying memorandum.)

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 5 Step 2 (cont'd)	See above	Converter 113 includes (a) digital input receiver 124 and formatter 125 which includes a digital audio formatter 125a and a digital video formatter 125b , OR (b) analog input receiver 127 and analog-to-digital converter 123 which includes analog audio converter 123a and analog video converter 123b , OR (c) a converter including both (a) and (b).	<p>“The items stored in source material library 111 . . . may be in either analog or digital form. Converter 113 therefore includes analog input receiver 127 and digital input receiver 124. If items have only one format, only one type of input receiver 124 or 127 is necessary.” (6:62-68.)</p> <p>“When the retrieved information . . . is analog, the information is input to an analog-to-digital converter 123.” (7:12-14.) “Converter [123] preferably includes an analog audio converter 123a and an analog video converter 123b.” (7:19-20.)</p> <p>“When the information . . . is digital, the digital signal is input to the digital input receiver 124 . . . Formatter 125 includes digital audio formatter 125a and digital video formatter 125b. The digital audio information is input into a digital audio formatter 125a and the digital video information, if any, is input into digital video formatter 125b.” (7:1-10.)</p>	Converter 113 may include an analog input receiver 127 , and associated components 123a and 123b , a digital input receiver 124 and associated components 125a and 125b , or both analog and digital input receivers and associated components depending on what type of items are in the source material library. “If items have only one format, only one type of input receiver 124 or 127 is necessary.” (6:66-68. Because this claim is not limited to retrieving either analog or digital information from the source material library, this claim covers any of the three implementations of converter 113 described in section I(A)(iii) of the accompanying memorandum.

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 5 Step 3	“ sending a request, by the user to the transmission system for at least a part of the stored information to be transmitted to a reception system associated with a receiving system at one of the remote locations selected by the user; ”	Components described in the specification and illustrated by Block Diagram 2b labeled library access interface 121 and library system control computer 1123 .	<p>“The library access interface 121 receives transmission requests either directly from the users or indirectly by remote order processing and item database 300.” (13:37-40.) (See section I(A)(viii) of accompanying memorandum for a further discussion of library access interface 121.)</p> <p>“All transmission requests from the access methods are placed into a transmission queue managed by the library system control computer 1123.” (15:33-35.) (See section I(A)(viii) of accompanying memorandum for a further discussion of library system control computer 1123.)</p>	Step 3 requires that the transmission system receive “a request from a user.” The transmission system must therefore have the library access interface 121 and the library system control computer 1123 , which are the only disclosed components of a “transmission system” that process user requests.

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 5 Step 4	“ sending at least a portion of the stored information from the transmission system to the reception system over an optical fiber communication path;”	Components described in the specification and illustrated by Block Diagram 2b labeled transmission format converter 119 and transmitter 122 .	<p>“The transmission format means 119 receives the request and retrieves the composite formatted data block of the requested item stored in compressed data library 118 and converts the compressed formatted data block into a format suitable for transmission.” (13:40-45.) “Each channel type is accessed through the use of a communications adaptor board or processor connecting the data processed in the transmission format converter 119 to the transmission channel.” (15:67-16:3.)</p> <p>“The reception system 200 includes transceiver 201 which receives the audio and/or video information transmitted by transmitter 122 of the transmission system 100.” (18:3-6.)</p> <p>“In order to serve a multitude of channel types, a preferred embodiment of the present invention includes a multitude of output ports of each type” (16:16-18.)</p>	As the citations in the preceding column indicate, and as further explained in section I(A)(vii) of the accompanying memorandum, “transmission format converter” 119 and “transmitter” 122 are both required to perform the Step 4 act of “sending . . . the stored information.” As also explained in section I(A)(vii) of the accompanying memorandum, the transmitter means must be capable of transmitting to a multiplicity of different communication channels including “common telephone service, ISDN and Broadband ISDN, DBS, cable television systems, microwave, and MAN.” (16:66-68.)
Claim 5 Step 5	“receiving the sent information by the reception system;”	This step is performed by, on or with a receiving system. (See Appendix B.)		

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 5 Step 6	“storing a complete copy of the received information in the reception system;”	This step is performed by, on or with a receiving system. (See Appendix B.)		
Claim 5 Step 7	“playing back the stored copy of the information sent over a cable communication path from the reception system to the receiving system at the selected remote location at a time requested by the user.”	This step is performed by, on or with a receiving system. (See Appendix B.)		

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“transmission system” / “central processing location” in Claim 14				
Claim 14 Step 1	“A method of distributing audio/video information comprising:”			
Claim 14 Step 2	“ transmitting compressed, digitized data representing a complete copy of at least one item of audio/video information at a non-real time rate from a central processing location; ”	Components described in the specification and illustrated by Block Diagram 2b labeled format converter 119 and transmitter 122 .	<p>“The transmission format means 119 receives the request and retrieves the composite formatted data block of the requested item stored in compressed data library 118 and converts the compressed formatted data block into a format suitable for transmission.” (13:40-45.)</p> <p>“Each channel type is accessed through the use of a communications adaptor board or processor connecting the data processed in the transmission format converter 119 to the transmission channel.” (15:67-16:3.)</p> <p>“The reception system 200 includes transceiver 201 which receives the audio and/or video information transmitted by transmitter 122 of the transmission system 100.” (18:3-6.)</p> <p>“In order to serve a multitude of channel types, a preferred embodiment of the present invention includes a multitude of output ports of each type.” (16:16-18.)</p>	<p>“The Court finds that the phrase ‘transmission system’ as used in Claim 14 is the ‘transmission system’ which the Court previously defined in its December 14 Order. (December 14 Order Section IA3.) Accordingly, the ‘central processing location’ is a limitation which defines the functional location of the ‘transmission system.’” (4th CCO at 6.)</p>

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 14 Step 2 (cont'd)	See above			As the citations in the preceding column indicate, and as further explained in section I(A)(vii) of the accompanying memorandum, “transmission format converter” 119 and “transmitter” 122 are both required to perform the Step 2 act of “transmitting.” As also explained in section I(A)(vii) of the accompanying memorandum, the transmitter means must be capable of transmitting to a multiplicity of different communication channels including “common telephone service, ISDN and Broadband ISDN, DBS, cable television systems, microwave, and MAN.” (16:66-68.)

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 14 Step 3	“receiving the transmitted compressed, digitized data representing a complete copy of the at least one item of audio/video information, at a local distribution system remote from the central processing location;”	This step is performed by, on or with a receiving system. (See Appendix B.)		
Claim 14 Step 4	“storing the received compressed digitized data representing the complete copy of the at least one item at the local distribution system;”	This step is performed by, on or with a receiving system. (See Appendix B.)		

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 14 Step 5	“in response to the stored compressed, digitized data, transmitting a representation of the at least one item at a real-time rate to at least one of a plurality of subscriber receiving stations coupled to the local distribution system; and”	This step is performed by, on or with a receiving system. (See Appendix B.)		

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 14 Step 6	“decompress- ing the com- pressed, digitized data representing the at least one item of audio/video information after the transmission step wherein the de- compressing step is performed in the local distribution system to produce the representation of the at least one item for transmission to the at least one subscriber station;”	This step is performed by, on or with a receiving system. (See Appendix B.)		

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 14 Step 7	"wherein the transmitting step comprises:"			

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 14 Step 8	“inputting an item having information into the transmission system;”	The component described in the specification and illustrated by Block Diagram 2a labeled source material library 111 .	“The source material library 111 may include different types of materials including television programs, movies, audio recordings, still pictures, files, books, computer tapes, computer disks, documents of various sorts, musical instruments, and other physical objects.” (6:10-15.)	<p>The Court held that the “items . . . containing information” in this limitation means “physical items. . . ” (3rd CCO at 15.) The only place such items can exist “in a transmission system” is in the source material library. (“the specification discloses a component of the ‘transmission system,’ i.e., the ‘source material library’ as a component which holds items.” 5th CCO at 16.) Accordingly, the source material library is necessary to serve as the place “in a transmission system” that holds the physical “items.”</p> <p>However, there is no disclosure of “inputting” a physical item into a source material library, or of any components of a transmission system to perform that function. As the Court stated, “the specification does not contain any description of how the transmission system places items into the system.” (5th CCO at 16.)</p>

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 14 Step 9	“assigning a unique identification code to the item having information;”	The component described in the specification and illustrated by Block Diagram 2a labeled identification encoder 112 .	“Prior to being made accessible to a user . . . the item must be . . . given a unique identification code by identification encoder 112 .” (6:35-39.)	<p>As described in the excerpt from the specification included in the preceding column, and as further explained in section I(A)(ii) of the accompanying memorandum, the identification encoder 112 is the only component of a transmission system capable of assigning a unique identification code.</p> <p>However, the identification encoder assigns the identification code to the information retrieved from the item (as claimed in Claim 41 Step 4), not the physical item itself. There is no disclosure of a component which assigns an identification code to the physical “item having information.”</p>

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 14 Step 10	“formatting the item having information as a sequence of addressable data blocks;”	The component described in the specification and illustrated by Block Diagram 2a to labeled converter 113 , time encoder 114 .	<p>“After the retrieved information is converted and formatted by the converter 113, the information may be time encoded by the time encoder 114” which is the preferred “ordering means.” (7:64-66.)</p> <p>“The transmission system 100 . . . also preferably includes ordering means for placing the formatted information into a sequence of addressable data blocks. As shown in FIG. 2a, the ordering means in the preferred embodiment includes time encoder 114.” (7:59-63.)</p>	<p>As described in the excerpts from the specification included in the preceding column, and for the reasons described in Section I(A)(iii) and (iv) of the accompanying memorandum, time encoder 114 makes a sequence of data blocks “addressable.” Time encoder can only operate on information that has been processed by converter 113, however, so both are required to format information into a sequence of addressable data blocks.</p> <p>However, neither converter 113 nor time encoder 114 are capable of formatting physical “items having information.” Accordingly, the patent does not describe any components that perform Step 10.</p>

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 14 Step 10 (cont'd)	See above	Converter 113 includes (a) digital input receiver 124 and formatter 125 which includes a digital audio formatter 125a and a digital video formatter 125b , OR (b) analog input receiver 127 and analog-to-digital converter 123 which includes analog audio converter 123a and analog video converter 123b , OR (c) a converter including both (a) and (b).	<p>“The items stored in source material library 111 . . . may be in either analog or digital form. Converter 113 therefore includes analog input receiver 127 and digital input receiver 124. If items have only one format, only one type of input receiver 124 or 127 is necessary.” (6:62-68.)</p> <p>“When the retrieved information . . . is analog, the information is input to an analog-to-digital converter 123.” (7:12-14.) “Converter [123] preferably includes an analog audio converter 123a and an analog video converter 123b.” (7:19-20.)</p> <p>“When the information . . . is digital, the digital signal is input to the digital input receiver 124 . . . Formatter 125 includes digital audio formatter 125a and digital video formatter 125b. The digital audio information is input into a digital audio formatter 125a and the digital video information, if any, is input into digital video formatter 125b.” (7:1-10.)</p>	Converter 113 may include an analog input receiver 127 , and associated components 123a and 123b , a digital input receiver 124 and associated components 125a and 125b , or both analog and digital input receivers and associated components depending on what type of items are in the source material library. “If items have only one format, only one type of input receiver 124 or 127 is necessary.” (6:66-68.) Because this claim is not limited to retrieving either analog or digital information from the source material library, this claim covers any of the three implementations of converter 113 described in section I(A)(iii) of the accompanying memorandum.

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 14 Step 11	“ compressing the formatted and sequenced data blocks;”	Components described in the specification and illustrated by Block Diagram 2a labeled precompression processor 115 and compressor 116 .	<p>The time encoder passes the data “to the precompression processor 115.” (8:16-19.)</p> <p>“Video precompression processor 115b buffers incoming video data and converts the aspect ratio and frame rate of the data, as required by compression processor 116.” (8:67-9:2.)</p> <p>“Once precompression processing is finished, the frames are compressed by the data compressor 116.” (9:41-42.)</p>	Step 11 requires compression. The specification explains that precompression processing prior to processing by the compressor is “required.” As described in the specification excerpts in preceding column and in section I(A)(v) of the accompanying memorandum, both precompression processor 115 and compressor 116 are required to perform compression.
Claim 14 Step 12	“ storing, as a file , the compressed, formatted, and sequenced data blocks with the assigned unique identification code;”	Components described in the specification and illustrated by Block Diagrams 2a and 2b labeled compressed data formatter 117 and compressed data library 118 .	<p>“After compression processing by compressor 116, the compressed audio and video data is preferably formatted and placed into a single file by the compressed data storage means 117.” (10:23-26.)</p> <p>“After the data is processed into a file by the compressed data storage means 117, it is preferably stored in a compressed data library 118.” (10:36-39.)</p> <p>“Prior to being made accessible to a user of the transmission and receiving system of the present invention, the item must be stored in at least one compressed data library 118.” (6:35-38.)</p>	As the citations in the preceding column indicate, and as further explained in section (I)(A)(vi) of the accompanying memorandum, both “compressed data formatter” 117 and “compressed data library” 118 are required to perform the “storing” required by Step 12.

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 14 Step 13	“ sending at least a portion of the file at the non-real time rate to the local distribution system.”	Components described in the specification and illustrated by Block Diagram 2b labeled transmission format converter 119 and transmitter 122 .	<p>“The transmission format means 119 receives the request and retrieves the composite formatted data block of the requested item stored in compressed data library 118 and converts the compressed formatted data block into a format suitable for transmission.” (13:40-45.)</p> <p>“Each channel type is accessed through the use of a communications adaptor board or processor connecting the data processed in the transmission format converter 119 to the transmission channel.” (15:67-16:3.)</p> <p>“The reception system 200 includes transceiver 201 which receives the audio and/or video information transmitted by transmitter 122 of the transmission system 100.” (18:3-6.)</p> <p>“In order to serve a multitude of channel types, a preferred embodiment of the present invention includes a multitude of output ports of each type.” (16:16-18.)</p>	As the citations in the preceding column indicate, and as further explained in section I(A)(vii) of the accompanying memorandum, “transmission format converter” 119 and “transmitter” 122 are both required to perform the Step 13 act of “sending . . . the file.” As also explained in section I(A)(vii) of the accompanying memorandum, the transmitter means must be capable of transmitting to a multiplicity of different communication channels including “common telephone service, ISDN and Broadband ISDN, DBS, cable television systems, microwave, and MAN.” (16:66-68.)

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“transmission system” / “central processing location” in Claim 15				
Claim 15	“A method as recited in claim 14, wherein the inputting step comprises inputting the item having information as blocks of digital data.”	Claim 15 depends from Claim 14, and therefore includes all of the components of a “transmission system” required by Claim 14.		There is no disclosure of “inputting” a physical item into a source material library at all, much less inputting an “item having information as blocks of digital data.” Similarly, there is no disclosure of any components of a transmission system which perform such inputting. As the Court stated, “the specification does not contain any description of how the transmission system places items into the system.” (5 th CCO at 16.)

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“transmission system” / “central processing location” in Claim 16				
Claim 16	“A method as recited in claim 14, wherein the inputting step comprises: inputting the item having information as an analog signal; and converting the analog signal to blocks of digital data.”	Claim 16 depends from Claim 14, and therefore includes all of the components of a “transmission system” required by Claim 14.		There is no disclosure of “inputting” a physical item into a source material library at all, much less inputting an “item having information as an analog signal; and converting the analog signal to blocks of digital data.” Similarly, there is no disclosure of any components of a transmission system which perform such inputting. As the Court stated, “the specification does not contain any description of how the transmission system places items into the system.” (5 th CCO at 16.)
“transmission system” / “central processing location” in Claim 17				
Claim 17 Step 1	“A method of distributing audio/video information comprising:”			

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 17 Step 2	“formatting items of audio/video information as compressed digitized data at a central processing location;”	See Steps 7-11 below.		
Claim 17 Step 3	“ transmitting compressed, digitized data representing a complete copy of at least one item of audio/video information from the central processing location; ”	Components described in the specification and illustrated by Block Diagram 2b labeled format converter 119 and transmitter 122 .	<p>“The transmission format means 119 receives the request and retrieves the composite formatted data block of the requested item stored in compressed data library 118 and converts the compressed formatted data block into a format suitable for transmission.” (13:40-45.)</p> <p>“Each channel type is accessed through the use of a communications adaptor board or processor connecting the data processed in the transmission format converter 119 to the transmission channel.” (15:67-16:3.)</p> <p>“The reception system 200 includes transceiver 201 which receives the audio and/or video information transmitted by transmitter 122 of the transmission system 100.” (18:3-6.)</p> <p>“In order to serve a multitude of channel types, a preferred embodiment of the present invention includes a multitude of output ports of each type.” (16:16-18.)</p>	<p>“The Court finds that the phrase ‘transmission system’ as used in Claim 14 is the ‘transmission system’ which the Court previously defined in its December 14 Order. (December 14 Order Section IA3.) Accordingly, the ‘central processing location’ is a limitation which defines the functional location of the ‘transmission system.’” (4th CCO at 6.)</p>

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 17 Step 3 (cont'd)	See above			As the citations in the preceding column indicate, and as further explained in section I(A)(vii) of the accompanying memorandum, “transmission format converter” 119 and “transmitter” 122 are both required to perform the Step 3 act of “transmitting.” As also explained in section I(A)(vii) of the accompanying memorandum, the transmitter means must be capable of transmitting to a multiplicity of different communication channels including “common telephone service, ISDN and Broadband ISDN, DBS, cable television systems, microwave, and MAN.” (16:66-68.)

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 17 Step 4	“receiving the transmitted compressed, digitized data representing a complete copy of the at least one item of audio/video information, at a local distribution system;”	This step is performed by, on or with a receiving system. (See Appendix B.)		
Claim 17 Step 5	“storing the received compressed, digitized data representing the complete copy of the at least one item at a local distribution system;”	This step is performed by, on or with a receiving system. (See Appendix B.)		

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 17 Step 6	“using the stored compressed, digitized data to transmit a representation of the at least one item to at a plurality of subscriber receiving stations coupled to the local distribution system;”	This step is performed by, on or with a receiving system. (See Appendix B.)		
Claim 17 Step 7	“wherein the formatting step comprises:”			

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 17 Step 8	“inputting an item having information into the transmission system;”	The component described in the specification and illustrated by Block Diagram 2a labeled source material library 111 .	“The source material library 111 may include different types of materials including television programs, movies, audio recordings, still pictures, files, books, computer tapes, computer disks, documents of various sorts, musical instruments, and other physical objects.” (6:10-15.)	<p>The Court held that the “items . . . containing information” in this limitation means “physical items. . .” (3rd CCO at 15.) The only place such items can exist “in a transmission system” is in the source material library. (“the specification discloses a component of the ‘transmission system,’ i.e., the ‘source material library’ as a component which holds items.” 5th CCO at 16.) Accordingly, the source material library is necessary to serve as the place “in a transmission system” that holds the physical “items.”</p> <p>However, there is no disclosure of “inputting” a physical item into a source material library, or of any components of a transmission system to perform that function. As the Court stated, “the specification does not contain any description of how the transmission system places items into the system.” (5th CCO at 16.)</p>

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 17 Step 9	“assigning a unique identification code to the item having information;”	The component described in the specification and illustrated by Block Diagram 2a labeled identification encoder 112 .	“Prior to being made accessible to a user . . . the item must be . . . given a unique identification code by identification encoder 112 .” (6:35-39.)	<p>As described in the excerpt from the specification included in the preceding column, and as further explained in section I(A)(ii) of the accompanying memorandum, the identification encoder 112 is the only component of a transmission system capable of assigning a unique identification code.</p> <p>However, the identification encoder assigns the identification code to the information retrieved from the item (as claimed in Claim 41 Step 4), not the physical item itself. There is no disclosure of a component which assigns an identification code to the physical “item having information.”</p>

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 17 Step 10	“formatting the item having information as a sequence of addressable data blocks; and”	The component described in the specification and illustrated by Block Diagram 2a to labeled converter 113 , time encoder 114 .	<p>“After the retrieved information is converted and formatted by the converter 113, the information may be time encoded by the time encoder 114” which is the preferred “ordering means.” (7:64-66.)</p> <p>“The transmission system 100 . . . also preferably includes ordering means for placing the formatted information into a sequence of addressable data blocks. As shown in FIG. 2a, the ordering means in the preferred embodiment includes time encoder 114.” (7:59-63.)</p>	<p>As described in the excerpts from the specification included in the preceding column, and for the reasons described in Section I(A)(iii) and (iv) of the accompanying memorandum, time encoder 114 makes a sequence of data blocks “addressable.” Time encoder can only operate on information that has been processed by converter 113, however, so both are required to format information into a sequence of addressable data blocks.</p> <p>However, neither converter 113 nor time encoder 114 are capable of formatting physical “items having information.” Accordingly, the patent does not describe any components that perform Step 10.</p>

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 17 Step 10 (cont'd)	See above	Converter 113 includes (a) digital input receiver 124 and formatter 125 which includes a digital audio formatter 125a and a digital video formatter 125b , OR (b) analog input receiver 127 and analog-to-digital converter 123 which includes analog audio converter 123a and analog video converter 123b , OR (c) a converter including both (a) and (b).	<p>“The items stored in source material library 111 . . . may be in either analog or digital form. Converter 113 therefore includes analog input receiver 127 and digital input receiver 124. If items have only one format, only one type of input receiver 124 or 127 is necessary.” (6:62-68.)</p> <p>“When the retrieved information . . . is analog, the information is input to an analog-to-digital converter 123.” (7:12-14.) “Converter [123] preferably includes an analog audio converter 123a and an analog video converter 123b.” (7:19-20.)</p> <p>“When the information . . . is digital, the digital signal is input to the digital input receiver 124 . . . Formatter 125 includes digital audio formatter 125a and digital video formatter 125b. The digital audio information is input into a digital audio formatter 125a and the digital video information, if any, is input into digital video formatter 125b.” (7:1-10.)</p>	Converter 113 may include an analog input receiver 127 , and associated components 123a and 123b , a digital input receiver 124 and associated components 125a and 125b , or both analog and digital input receivers and associated components depending on what type of items are in the source material library. “If items have only one format, only one type of input receiver 124 or 127 is necessary.” (6:66-68.) Because this claim is not limited to retrieving either analog or digital information from the source material library, this claim covers any of the three implementations of converter 113 described in section I(A)(iii) of the accompanying memorandum.

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 17 Step 11	" compressing the formatted and sequenced data blocks."	Components described in the specification and illustrated by Block Diagram 2a labeled precompression processor 115 , compressor 116 , compressed data formatter 117 and compressed data library 118 .	<p>The time encoder passes the data "to the precompression processor 115." (8:16-19.)</p> <p>"Video precompression processor 115b buffers incoming video data and converts the aspect ratio and frame rate of the data, as required by compression processor 116." (8:67-9:2.)</p> <p>"Once precompression processing is finished, the frames are compressed by the data compressor 116." (9:41-42.)</p> <p>"After compression processing by compressor 116, the compressed audio and video data is preferably formatted and placed into a single file by the compressed data storage means 117." (10:23-26.)</p> <p>"After the data is processed into a file by the compressed data storage means 117, it is preferably stored in a compressed data library 118." (10:36-39.)</p> <p>"Prior to being made accessible to a user of the transmission and receiving system of the present invention, the item must be stored in at least one compressed data library 118." (6:35-38.)</p>	<p>Step 11 requires compression. The specification explains that precompression processing prior to processing by the compressor is "required." As described in the specification excerpts in preceding column and in section I(A)(v) of the accompanying memorandum, both precompression processor 115 and compressor 116 are required to perform compression.</p> <p>As the citations in the preceding column indicate, and as further explained in section (I)(A)(vi) of the accompanying memorandum, storage of the compressed data is also required by both the "compressed data formatter" 117 and "compressed data library" 118. The compressed data must be stored because Step 3 requires transmitting the compressed data. The specification makes clear that the "transmission system" cannot transmit compressed data unless it is</p>

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
	See above			stored first. (“Prior to being made accessible to a user of the transmission and receiving system of the present invention, the item must be stored in at least one compressed data library 118 .” (6:35-38.)

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“transmission system” / “central processing location” in Claim 18				
Claim 18	“A method as recited in claim 17, wherein the inputting step comprises inputting the item having information as blocks of digital data.”	Claim 18 depends from Claim 17, and therefore includes all of the components of a “transmission system” required by Claim 17.		There is no disclosure of “inputting” a physical item into a source material library at all, much less inputting an “item having information as blocks of digital data.” Similarly, there is no disclosure of any components of a transmission system which perform such inputting. As the Court stated, “the specification does not contain any description of how the transmission system places items into the system.” (5 th CCO at 16.)

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“transmission system” / “central processing location” in Claim 19				
Claim 19	“A method as recited in claim 17, wherein the inputting step comprises: inputting the item having information as an analog signal and converting the analog signal to blocks of digital data.”	Claim 19 depends from Claim 17, and therefore includes all of the components of a “transmission system” required by Claim 17.		There is no disclosure of “inputting” a physical item into a source material library at all, much less inputting an “item having information as an analog signal; and converting the analog signal to blocks of digital data.” Similarly, there is no disclosure of any components of a transmission system which perform such inputting. As the Court stated, “the specification does not contain any description of how the transmission system places items into the system.” (5 th CCO at 16.)

APPENDIX B

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“receiving system” in Claim 19				
Claim 19 Step 1	“A distribution method responsive to requests from a user identifying items in a transmission system containing information to be sent from the transmission system to receiving systems at remote locations, the method comprising the steps of:”	The elements of the “receiving system” required to perform the steps of Claim 19 are explained below.		

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 19 Step 2	“storing, in the transmission system, information from items in a compressed data form, the information including an identification code and being placed into ordered data blocks;”	This step is performed by, on or with a transmission system. (See Appendix A.)		

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 19 Step 3	“sending a request, by the user to the transmission system, for at least a part of the stored information to be transmitted to the one of the receiving systems at one of the remote location selected by the user;”	This step is performed by, on or with a transmission system. (See Appendix A.)		
Claim 19 Step 4	“sending at least a portion of the stored information from the transmission system to the receiving system at the selected remote location;”	This step is performed by, on or with a transmission system. (See Appendix A.)		

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 19 Step 5	“receiving the sent information by the receiving system at the selected remote location;”	The component described in the specification and illustrated by FIG. 6 labeled transceiver 201 .	“The reception system 200 includes transceiver 201 which receives the audio and/or video information transmitted by transmitter 122 of the transmission system 100 .” (18:3-6.)	
Claim 19 Step 6	“storing a complete copy of the received information in the receiving system at the selected remote location; and”	The components described in the specification and illustrated by FIG. 6 labeled receiver format conversion 202 and storage 203 .	<p>“. . . receiver format conversion means, coupled to the transceiver means, for converting the compressed formatted data blocks into a format suitable for storage and processing resulting in playback in real time.” (3:3-7.)</p> <p>“The receiver format converter 202 converts the compressed formatted data blocks into a format suitable for playback by the user in real time.” (18:10-13.)</p> <p>“[T]he user may want to play back the requested item . . . at a time later than when initially requested. If that is the case, the compressed formatted data blocks from receiver format converter 202 are stored in storage 203. Storage 203 allows for temporary storage of the requested item until playback is requested.” (18:15-21.)</p>	Step 6 requires storing the received information. This can only occur in storage 203 which requires, prior to storage, a format conversion performed by receiver format converter 202 to put the information into a “format suitable for storage.” (3:3-6.)

Patent '992	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 19 Step 7	“playing back the stored copy of the information using the receiving system at the selected remote location at a time requested by the user.”	The components described in the specification and illustrated by FIG. 6 labeled data formatter 204 , decompressors 205 , including video de-compressor 208 and audio de-compressor 209 , and converter 206 , including digital video output converter 211 , digital audio output converter 212 , analog video output converter 213 and analog audio output converter 214 .	<p>“When playback is requested, the compressed formatted data blocks are sent ot [sic] data formatter 204. Data formatter 204 processes the compressed formatted data blocks and distinguishes audio information from video information.” (18:22-26.)</p> <p>“The separated audio and video information are respectively decompressed by audio decompressor 209 and video decompressor 208. The decompressed video data is then sent simultaneously to converter 206 including digital video output converter 211 and analog video output converter 213. The decompressed audio data is sent simultaneously to digital audio output converter 212 and analog audio output converter 214. The outputs from converters 211-214 are produced in real time.” (18:27-36.)</p>	<p>As described in the preceding column and in section II(A) of the accompanying memorandum, all of the identified components are required to effectuate playback.</p> <p>However, there are no components disclosed which control retrieval of information from storage 203. There are no components to instruct storage 203 which information is to be retrieved or when, or to advise storage 203 to play the information at the time the user requested.</p>

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“receiving system” in Claim 2				
Claim 2 Step 1	“A distribution method responsive to requests from a user identifying items in a transmission system containing information to be sent from the transmission system to receiving systems at remote locations, the method comprising the steps of:”	The elements of the “receiving system” required to perform the steps of Claim 2 are explained below.		

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 2 Step 2	“storing, in the transmission system, information from items in a compressed data form, the information including an identification code and being placed into ordered data blocks;”	This step is performed by, on or with a transmission system. (See Appendix A.)		

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 2 Step 3	“sending a request, by the user to the transmission system for at least a part of the stored information to be transmitted to a reception system associated with a receiving system at one of the remote locations selected by the user;”	This step is performed by, on or with a transmission system. (See Appendix A.)		
Claim 2 Step 4	“sending at least a portion of the stored information from the transmission system to the reception system;”	This step is performed by, on or with a transmission system. (See Appendix A.)		

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 2 Step 5	“receiving the sent information by the reception system;”	The component described in the specification and illustrated by FIG. 6 labeled transceiver 201 .	“The reception system 200 includes transceiver 201 which receives the audio and/or video information transmitted by transmitter 122 of the transmission system 100 .” (18:3-6.)	
Claim 2 Step 6	“storing a complete copy of the received information in the reception system; and”	The components described in the specification and illustrated by FIG. 6 labeled receiver format conversion 202 and storage 203 .	<p>“... receiver format conversion means, coupled to the transceiver means, for converting the compressed formatted data blocks into a format suitable for storage and processing resulting in playback in real time.” (3:3-7.)</p> <p>“The receiver format converter 202 converts the compressed formatted data blocks into a format suitable for playback by the user in real time.” (18:10-13.)</p> <p>“[T]he user may want to play back the requested item . . . at a time later than when initially requested. If that is the case, the compressed formatted data blocks from receiver format converter 202 are stored in storage 203. Storage 203 allows for temporary storage of the requested item until playback is requested.”</p>	Step 6 requires storing the received information. This can only occur in storage 203 which requires, prior to storage, a format conversion performed by receiver format converter 202 to put the information into a “format suitable for storage.” (3:3-6.)

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 2 Step 7	“playing back the stored copy of the information from the reception system to the receiving system at the selected remote location at a time requested by the user.”	The components described in the specification and illustrated by FIG. 6 labeled data formatter 204 , decompressors 205 , including video de-compressor 208 and audio de-compressor 209 , and converter 206 , including digital video output converter 211 , digital audio output converter 212 , analog video output converter 213 and analog audio output converter 214 .	<p>“When playback is requested, the compressed formatted data blocks are sent ot [sic] data formatter 204. Data formatter 204 processes the compressed formatted data blocks and distinguishes audio information from video information.” (18:22-26.)</p> <p>“The separated audio and video information are respectively decompressed by audio decompressor 209 and video decompressor 208. The decompressed video data is then sent simultaneously to converter 206 including digital video output converter 211 and analog video output converter 213. The decompressed audio data is sent simultaneously to digital audio output converter 212 and analog audio output converter 214. The outputs from converters 211-214 are produced in real time.” (18:27-36.)</p>	<p>As described in the preceding column and in section II(A) of the accompanying memorandum, all of the identified components are required to effectuate playback.</p> <p>However, there are no components disclosed which control retrieval of information from storage 203. There are no components to instruct storage 203 which information is to be retrieved or when, or to advise storage 203 to play the information at the time the user requested.</p>

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 2 Step 7 (cont'd)	See above			In addition, the specification does not disclose “playing back” or sending information from one reception system to another. The specification discloses only playing back to a playback device such as a TV. (18:36-37.) As the Court has already held, “there is no support in the written description for defining a configuration for one reception system communicating to another reception system.” (3 rd CCO at 35.) Accordingly, although the components in the preceding column provide some support for playback to a <i>playback device</i> , no component disclosed in the specification corresponds to the requirement of playing back to another receiving system.

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“receiving system” in Claim 5				
Claim 5 Step 1	“A distribution method responsive to requests from a user identifying items in a transmission system containing information to be sent from the transmission system to receiving systems at remote locations, the method comprising the steps of:”	The elements of the “receiving system” required to perform the steps of Claim 5 are explained below.		

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 5 Step 2	“storing, in the transmission system, information from items in a compressed data form, the information including an identification code and being placed into ordered data blocks;”	This step is performed by, on or with a transmission system. (See Appendix A.)		

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 5 Step 3	“sending a request, by the user to the transmission system, for at least a part of the stored information to be transmitted to a reception system associated with a receiving system at one of the remote locations selected by the user;”	This step is performed by, on or with a transmission system. (See Appendix A.)		

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 5 Step 4	“sending at least a portion of the stored information from the transmission system to the reception system over an optical fiber communication path;”	This step is performed by, on or with a transmission system. (See Appendix A.)		
Claim 5 Step 5	“receiving the sent information by the reception system;”	The component described in the specification and illustrated by FIG. 6 labeled transceiver 201 .	“The reception system 200 includes transceiver 201 which receives the audio and/or video information transmitted by transmitter 122 of the transmission system 100 .” (18:3-6.)	

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 5 Step 6	“storing a complete copy of the received information in the reception system; and”	The components described in the specification and illustrated by FIG. 6 labeled receiver format conversion 202 and storage 203 .	<p>“. . . receiver format conversion means, coupled to the transceiver means, for converting the compressed formatted data blocks into a format suitable for storage and processing resulting in playback in real time.” (3:3-7.)</p> <p>“The receiver format converter 202 converts the compressed formatted data blocks into a format suitable for playback by the user in real time.” (18:10-13.)</p> <p>“[T]he user may want to play back the requested item . . . at a time later than when initially requested. If that is the case, the compressed formatted data blocks from receiver format converter 202 are stored in storage 203. Storage 203 allows for temporary storage of the requested item until playback is requested.”</p>	Step 6 requires storing the received information. This can only occur in storage 203 which requires, prior to storage, a format conversion performed by receiver format converter 202 to put the information into a “format suitable for storage.” (3:3-6.)

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 5 Step 7	“playing back the stored copy of the information sent over a cable communication path from the reception system to the receiving system at the selected remote location at a time requested by the user.”	The components described in the specification and illustrated by FIG. 6 labeled data formatter 204 , decompressors 205 , including video de-compressor 208 and audio de-compressor 209 , and converter 206 , including digital video output converter 211 , digital audio output converter 212 , analog video output converter 213 and analog audio output converter 214 .	<p>“When playback is requested, the compressed formatted data blocks are sent ot [sic] data formatter 204. Data formatter 204 processes the compressed formatted data blocks and distinguishes audio information from video information.” (18:22-26.)</p> <p>“The separated audio and video information are respectively decompressed by audio decompressor 209 and video decompressor 208. The decompressed video data is then sent simultaneously to converter 206 including digital video output converter 211 and analog video output converter 213. The decompressed audio data is sent simultaneously to digital audio output converter 212 and analog audio output converter 214. The outputs from converters 211-214 are produced in real time.” (18:27-36.)</p>	<p>As described in the preceding column and in section II(A) of the accompanying memorandum, all of the identified components are required to effectuate playback.</p> <p>However, there are no components disclosed which control retrieval of information from storage 203. There are no components to instruct storage 203 which information is to be retrieved or when, or to advise storage 203 to play the information at the time the user requested.</p>

Patent '275	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 5 Step 7 (cont'd)	See above			In addition, the specification does not disclose “playing back” or sending information from one reception system to another. The specification discloses only playing back to a playback device such as a TV. (18:36-37.) As the Court has already held, “there is no support in the written description for defining a configuration for one reception system communicating to another reception system.” (3 rd CCO at 35.) Accordingly, although the components in the preceding column provide some support for playback to a <i>playback device</i> , no component disclosed in the specification corresponds to the requirement of playing back to another receiving system.

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“receiving system” / “distribution system” in Claim 14				
Claim 14 Step 1	“A method of distributing audio/video information comprising:”	The elements of the receiving system required to perform the steps of Claim 14 are explained below.		
Claim 14 Step 2	“transmitting compressed, digitized data representing a complete copy of at least one item of audio/video information at a non-real time rate from a central processing location;”	This step is performed by, on or with a transmission system. (See Appendix A.)		

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 14 Step 3	“ receiving the transmitted compressed, digitized data representing a complete copy of the at least one item of audio/video information, at a local distribution system remote from the central processing location;”	The component described in the specification and illustrated by FIG. 6 labeled transceiver 201 .	“The reception system 200 includes transceiver 201 which receives the audio and/or video information transmitted by transmitter 122 of the transmission system 100 .” (18:3-6.)	“[T]he Court construes ‘ local distribution system ’ to have the same meaning as ‘ reception system .’” (4 th CCO at 8.)

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 14 Step 4	“ storing the received compressed digitized data representing the complete copy of the at least one item at the local distribution system;”	The components described in the specification and illustrated by FIG. 6 labeled receiver format conversion 202 and storage 203 .	<p>“ . . . receiver format conversion means, coupled to the transceiver means, for converting the compressed formatted data blocks into a format suitable for storage and processing resulting in playback in real time.” (3:3-7.)</p> <p>“The receiver format converter 202 converts the compressed formatted data blocks into a format suitable for playback by the user in real time.” (18:10-13.)</p> <p>“[T]he user may want to play back the requested item . . . at a time later than when initially requested. If that is the case, the compressed formatted data blocks from receiver format converter 202 are stored in storage 203. Storage 203 allows for temporary storage of the requested item until playback is requested.” (18:15-21.)</p>	Step 4 requires storing the received data. This can only occur in storage 203 which requires, prior to storage, a format conversion performed by receiver format converter 202 to put the information into a “format suitable for storage.” (3:3-6.)

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 14 Step 5	“in response to the stored compressed, digitized data, transmitting a representation of the at least one item at a real-time rate to at least one of a plurality of subscriber receiving stations coupled to the local distribution system; and”	The components described in the specification and illustrated by FIG. 6 labeled data formatter 204 , decompressors 205 , including video de-compressor 208 and audio de-compressor 209 , and converter 206 , including digital video output converter 211 , digital audio output converter 212 , analog video output converter 213 and analog audio output converter 214 .	<p>“When playback is requested, the compressed formatted data blocks are sent ot [sic] data formatter 204. Data formatter 204 processes the compressed formatted data blocks and distinguishes audio information from video information.” (18:22-26.)</p> <p>“The separated audio and video information are respectively decompressed by audio decompressor 209 and video decompressor 208. The decompressed video data is then sent simultaneously to converter 206 including digital video output converter 211 and analog video output converter 213. The decompressed audio data is sent simultaneously to digital audio output converter 212 and analog audio output converter 214. The outputs from converters 211-214 are produced in real time.” (18:27-36.)</p>	<p>As described in the preceding column and in section II(A) of the accompanying memorandum, all of the identified components are required to effectuate playback.</p> <p>However, there are no components disclosed which control retrieval of information from storage 203. There are no components to instruct storage 203 which information is to be retrieved or when, or to retrieve the information from storage 203 “in response to the stored compressed, digitized data.”</p>

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
	See above			<p>Moreover, the Court has held that Claim 14 is ambiguous as to when “decompressing” occurs: “The Court finds that the ambiguity as to when in the sequence the ‘decompressing’ step is to be performed renders Claim 14 arguably indefinite.” (4th CCO at 5.) The components identified here are necessary if Step 5 requires playback of decompressed information, however, because the Court has found Claim 14 to be arguably indefinite, it is unclear whether these components are required for Steps 5-6.</p>

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 14 Step 6	<p>“decompress- ing the com- pressed, digitized data representing the at least one item of audio/video information after the transmission step wherein the de-compressing step is performed in the local distribution system to produce the representation of the at least one item for transmission to the at least one subscriber station;”</p>	<p>See Step 5 above for the components of a receiving system which perform decompression.</p>		

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 14 Step 7	“wherein the transmitting step comprises:”	This step is performed by, on or with a transmission system. (See Appendix A.)		
Claim 14 Step 8	“inputting an item having information into the transmission system;”	This step is performed by, on or with a transmission system. (See Appendix A.)		
Claim 14 Step 9	“assigning a unique identification code to the item having information;”	This step is performed by, on or with a transmission system. (See Appendix A.)		
Claim 14 Step 10	“formatting the item having information as a sequence of addressable data blocks;”	This step is performed by, on or with a transmission system. (See Appendix A.)		

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 14 Step 11	"compressing the formatted and sequenced data blocks;"	This step is performed by, on or with a transmission system. (See Appendix A.)		
Claim 14 Step 12	"storing, as a file, the compressed, formatted, and sequenced data blocks with the assigned unique identification code; and"	This step is performed by, on or with a transmission system. (See Appendix A.)		
Claim 14 Step 13	"sending at least a portion of the file at the non- real time rate to the local distribution system."	This step is performed by, on or with a transmission system. (See Appendix A.)		

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
“receiving system” / “distribution system” in Claim 17				
Claim 17 Step 1	“A method of distributing audio/video information comprising:”	The elements of the receiving system required to perform the steps of Claim 17 are explained below.		
Claim 17 Step 2	“formatting items of audio/video information as compressed digitized data at a central processing location;”	This step is performed by, on or with a transmission system. (See Appendix A.)		

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 17 Step 3	“transmitting compressed, digitized data representing a complete copy of at least one item of audio/video information from the central processing location;”	This step is performed by, on or with a transmission system. (See Appendix A.)		
Claim 17 Step 4	“ receiving the transmitted compressed, digitized data representing a complete copy of the at least one item of audio/video information, at a local distribution system; ”	The component described in the specification and illustrated by FIG. 6 labeled transceiver 201 .	“The reception system 200 includes transceiver 201 which receives the audio and/or video information transmitted by transmitter 122 of the transmission system 100 .” (18:3-6.)	“[T]he Court construes ‘ local distribution system ’ to have the same meaning as ‘ reception system .’” (4 th CCO at 8.)

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 17 Step 5	“ storing the received compressed, digitized data representing the complete copy of the at least one item at a local distribution system; and”	The components described in the specification and illustrated by FIG. 6 labeled receiver format conversion 202 and storage 203 .	<p>“ . . receiver format conversion means, coupled to the transceiver means, for converting the compressed formatted data blocks into a format suitable for storage and processing resulting in playback in real time.” (3:3-7.)</p> <p>“The receiver format converter 202 converts the compressed formatted data blocks into a format suitable for playback by the user in real time.” (18:10-13.)</p> <p>“[T]he user may want to play back the requested item . . . at a time later than when initially requested. If that is the case, the compressed formatted data blocks from receiver format converter 202 are stored in storage 203. Storage 203 allows for temporary storage of the requested item until playback is requested.” (18:15-21.)</p>	Step 5 requires storing the received information. This can only occur in storage 203 which requires, prior to storage, a format conversion performed by receiver format converter 202 to put the information into a “format suitable for storage.” (3:3-7.)

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 17 Step 6	“using the stored compressed, digitized data to transmit a representation of the at least one item to at a plurality of subscriber receiving stations coupled to the local distribution system;”	The components described in the specification and illustrated by FIG. 6 labeled data formatter 204 , decompressors 205 , including video de-compressor 208 and audio de-compressor 209 , and converter 206 , including digital video output converter 211 , digital audio output converter 212 , analog video output converter 213 and analog audio output converter 214 .	<p>“When playback is requested, the compressed formatted data blocks are sent ot [sic] data formatter 204. Data formatter 204 processes the compressed formatted data blocks and distinguishes audio information from video information.” (18:22-26.)</p> <p>“The separated audio and video information are respectively decompressed by audio decompressor 209 and video decompressor 208. The decompressed video data is then sent simultaneously to converter 206 including digital video output converter 211 and analog video output converter 213. The decompressed audio data is sent simultaneously to digital audio output converter 212 and analog audio output converter 214. The outputs from converters 211-214 are produced in real time.” (18:27-36.)</p>	<p>As described in the preceding column and in section II(A) of the accompanying memorandum, all of the identified components are required to effectuate playback.</p> <p>However, there are no components disclosed which control retrieval of information from storage 203. There are no components to instruct storage 203 which information is to be retrieved or when.</p>

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 17 Step 7	“wherein the formatting step comprises:”	This step is performed by, on or with a transmission system. (See Appendix A.)		
Claim 17 Step 8	“inputting an item having information into the transmission system;”	This step is performed by, on or with a transmission system. (See Appendix A.)		
Claim 17 Step 9	“assigning a unique identification code to the item having information;”	This step is performed by, on or with a transmission system. (See Appendix A.)		
Claim 17 Step 10	“formatting the item having information as a sequence of addressable data blocks; and”	This step is performed by, on or with a transmission system. (See Appendix A.)		

Patent '863	Patent Claim language	Component necessary to perform step	Supporting reference(s) from specification	Commentary
Claim 17 Step 12	"compressing the formatted and sequenced data blocks."	This step is performed by, on or with a transmission system. (See Appendix A.)		